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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/549,167	04/13/2000	Yukio Takahashi	Q58838	7906

7590

06/21/2004

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EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/549,167

Applicant(s)

TAKAHASHI ET AL.

Examiner

Timothy J Henn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-20 is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The amendment filed on April 20, 2004 overcomes the previous objections related to minor informalities in the specification. These objections are therefore withdrawn.
2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: DIGITAL CAMERA WITH SOFT KEY INPUT SYSTEM FOR CHANGING PICTURE TAKING SETTINGS.

Claim Objections

3. Claim 7 is objected to because of the following informalities: "at least of setting screens" is confusing, a change to "at least one of a plurality of setting screens" is suggested. Appropriate correction is required.

Response to Arguments

4. Applicant's arguments filed on April 20, 2004 in regard to claims 2-6 have been fully considered but they are not persuasive.

[claims 2-6]

On page 13 of the amendment the applicant argues that in Anderson "the buttons 413, 415 cannot correspond to the claimed first input devices at least because the buttons are not disposed adjacent to the key labels 410". While this is arguable, it is

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noted that the independent claim does not require both the first and second set of input devices to be disposed adjacent to the key labels. Claim 2 requires, inter alia:

a plurality of input devices respectively disposed adjacent to the set information items displayed on the display portion;

a plurality of first input devices disposed along a periphery of the display portion in a first direction which is in parallel with an axial line of the shutter button; and

a plurality of second input devices disposed in a second direction perpendicular to the first direction.

It is noted that in the Anderson reference, the buttons 412 correspond to the plurality of input devices disposed adjacent to the set information items as well as the second input devices and buttons 413 and 415 correspond to the plurality of first input devices.

Therefore, the rejections of claims 2, 3 and 6 under Anderson, the rejection of claim 4 over Anderson in view of Miller '648 and the rejection of claim 5 over Anderson in view of Miller '015 are maintained.

[claims 7-13]

5. Applicant's arguments with respect to claims 7-13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 2, 3 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson (US 6,486,914).

[claim 2]

In regard to claim 2, note that Anderson discloses a digital camera comprising an image pickup device (Figure 2, Item 244), a display portion capable of displaying a plurality of set information items (Figure 3, Item 402), a plurality of input devices (Figure 4, Items 410a, 410b, 411a, 411b, 413, 415) disposed adjacent to the set information items displayed on the display portion (Figure 7A, Items 410a, 410b, 410c), a changing device which changes at least one of the set information items in accordance with the input to at least one of the input devices which is disposed adjacent to at least one of the set information items (Column 7, Line 54 – Column 8, Line 41), a control portion which controls the digital camera in accordance with at least one of the set information items (Column 7, Line 54 – Column 8, Line 41); a shutter button capable of inputting an instruction to start photographing to the control portion (Figure 5, Item 418); a plurality of input devices (Figure 4, Items 413, 415) disposed along a periphery of a display portion in a first direction which is parallel with an axial line of the shutter button (Figure 5, Item 418) and a plurality of second input devices disposed in a second direction

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perpendicular to the first direction (Figure 4, Items 412).

[claim 3]

In regard to claim 3, note that the first input devices of Anderson (Figure 4, Items 413, 415) are disposed along a first side of the display portion adjacent to the shutter button (Figure 5, Item 418) and the second input devices (Figure 4, Items 412) are disposed along a second side of the display portion opposite to a third side of the display portion adjacent to the shutter button, across the display portion (Figure 4).

[claim 6]

In regard to claim 6, note that the display portion is capable of displaying an image in accordance with the image data (Figure 7B; Column 7, Lines 38-47).

8. Claims 7-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kodak DC210 Digital Camera.

[claim 7]

In regard to claim 7, note that the Kodak DC210 includes an image pickup portion which converts light from an object to be photographed, into image data (e.g. Page 1-2, CCD); a display portion (Page 104, "LCD Screen") capable of displaying at least of a plurality of setting screens including a plurality of set information items indicative of picture taking settings (e.g. Page 4-2, Quality); a display device which displays one type of a plurality of types of the setting screens on the display portion (e.g. Chapter 4; The office notes that a device to update the display with the plurality of types of setting screens is inherent); a plurality of input devices (e.g. Page 1-4; Up,

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Down, Left, Right and Do-IT buttons); a changing device which changes at least one of the set information items and which changes the type of setting screen in accordance with input to at least one of the input devices (e.g. Page 4-2, DO-IT button; The office notes that pressing the DO-IT button on certain icons changes the display to various types of setting screens as can be seen from the figures in Chapter 4); a control portion which controls the digital camera in accordance with at least one of the set information items (e.g. Page 2-11; The office notes that the camera changes the quality when taking pictures based upon the setting in the Quality section of Page 4-2); and a shutter button capable of inputting an instruction to start photographing to the control portion (Page 1-3, "SHUTTER").

[claim 8]

In regard to claim 8, note that the input device of the DC210 include a plurality of first input devices disposed along a periphery of the display portion in a first direction which is in parallel with an axial line of the shutter button (Page 1-4, Up, Down and DO-IT buttons) and a plurality of second input devices disposed in a second direction perpendicular to the first direction (Page 1-4, Left and Right buttons).

[claim 9]

In regard to claim 9, note that the input devices of the DC210 are disposed along a first side surface of the display portion adjacent to the shutter button (Page 1-3 - Page 1-4) and the second input devices are disposed along a second surface of the display portion opposite to a third side surface of the display portion adjacent to the shutter

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button (Page 1-3 - Page 1-4).

[claim 10]

In regard to claim 10, note that the input devices are disposed adjacent to (i.e. near) a plurality of set information items displayed on the display portion, respectively (e.g. Page 4-2; The office notes that claim 10 does not require a one to one correspondence an individual button and an individual set information item, merely that each button is disposed adjacent to a plurality of set information items).

[claim 11]

In regard to claim 11, note that the set information items include at least one kind of set information of shutter speed, aperture, white balance and flash (e.g. Pages 2-4 and 2-5).

[claim 13]

In regard to claim 13, note that the display portion is capable of displaying an image in accordance with image data (e.g. Page 2-3).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 6,486,914) in view of Miller et al. (US 6,310,648).

[claim 4]

In regard to claim 4, note that Anderson discloses a digital camera which meets the requirements set forth in claim 3 as discussed above. Therefore, it can be seen that Anderson lacks information items including shutter speed, aperture, white balance and flash.

Miller et al. teaches a digital camera with a soft key/menu user interface which includes the ability of displaying information set items related to shutter speed, aperture and white balance (Column 9, Lines 10-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include information set items related to shutter speed, aperture and white balance to allow better access to information items by the user.

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 6,486,914) in view of Miller et al. (US 6,233,015).

[claim 5]

In regard to claim 5, note that Anderson discloses a digital camera which meets the requirements set forth in claim 3 as discussed above. Therefore, it can be seen that Anderson lacks a circularly changing device, which circularly changes a plurality of contents of the set information items whenever input to the input devices is performed.

Miller et al. discloses a digital camera which includes scroll keys (Figure 3, Items 24, 26) disposed adjacent to thumbnail images or "set information items" (Figure 3, Items 42, 44, 46) which are scrollable in a circular pattern to allow the user to repeatedly scroll through a list of images without being forced to change directions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the circular scrolling of Miller et al. with the camera of Anderson to allow a user to circularly scroll through a list of information items without requiring the user to change directions.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kodak DC210 Digital Camera in view of Miller et al. (US 6,233,015).

[claim 12]

In regard to claim 12, note that the DC210 discloses a digital camera which meets the requirements set forth in claim 10 as discussed above. Therefore, it can be seen that the DC210 lacks a circularly changing device, which circularly changes a plurality of contents of the set information items whenever input to the input devices is performed.

Miller et al. discloses a digital camera which includes scroll keys (Figure 3, Items 24, 26) disposed adjacent to thumbnail images or "set information items" (Figure 3, Items 42, 44, 46) which are scrollable in a circular pattern to allow the user to repeatedly scroll through a list of images without being forced to change directions. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

combine the circular scrolling of Miller et al. with the DC210 camera to allow a user to circularly scroll through a list of information items without requiring the user to change directions.

Allowable Subject Matter

13. Claims 14-20 are allowed.

[claims 14-20]

In regard to claims 14-20, the prior art does not teach or fairly suggest a digital camera in which a group of alternatives are circularly scrollable if the number of alternatives of the set information items is less than a predetermined number, and a selection screen is displayed when the number of alternatives of the set information items is greater than a predetermined number.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art further shows the current state of the art in soft key camera input systems.

- | | | |
|-----|----------|--------------|
| i. | Anderson | US 6,154,210 |
| ii. | Anderson | US 6,680,749 |

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

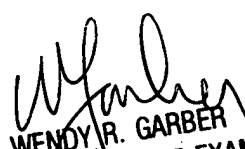
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
6/2/2004


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